

FORM PTO-1449

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Atty Docket No.

P1099R2C1

Serial No.

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## LIST OF DISCLOSURES CITED BY APPLICANT

(Use several sheets if necessary)

Applicant

Arathoon et al.

Filing Date

07 Mar 2000

Group

Unassigned

## U.S. PATENT DOCUMENTS

Examiner Initials		Document Number	Date	Name	Class	Subclass	Filing Date
EW	* 1	4,816,567	28.03.89	Cabilly et al.			
	* 2	5,116,964	26.05.92	Capon et al.			

## FOREIGN PATENT DOCUMENTS

Examiner Initials		Document Number	Date	Country	Class	Subclass	Translation Yes	No
EW	* 3	314,317	03.05.89	EPO				
	* 4	WO 89/02922	06.04.89	PCT				
	* 5	WO 91/08298	13.06.91	PCT				
	* 6	WO 92/10209	25.06.92	PCT				
	* 7	WO 92/22653	23.12.92	PCT				
	* 8	WO 93/06217	01.04.93	PCT				
	* 9	WO 93/11162	10.06.93	PCT				
	*10	WO 96/27011	06.09.96	PCT				
	*11	WO 96/37621	28.11.96	PCT				

## OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)

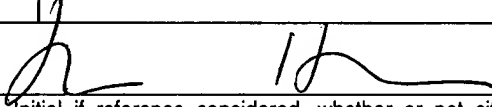
EW	*12	Berg et al., "Bispecific Antibodies that Mediate Killing of Cells Infected with Human Immunodeficiency Virus of Any Strain" <u>Proc. Natl. Acad. Sci. USA</u> 88:4723-4727 (June 1991)						X
EW	*13	Berman et al., "Protection from Genital Herpes Simplex Virus Type 2 Infection by Vaccination with Cloned Type 1 Glycoprotein D" <u>Science</u> 227(4693):1490-1492 (March 22, 1985)						X
EW	*14	Byrn et al., "Biological Properties of a CD4 Immunoadhesin" <u>Nature</u> 344:667-670 (April 12, 1990)						X
EW	*15	Carter et al., "Engineering Subtilisin BPN' for Site-Specific Proteolysis" <u>Proteins: Struct. Funct., Genet.</u> 6:240-248 (1989)						X
EW	*16	Carter et al., "High level Escherichia coli expression and production of a bivalent humanized antibody fragment" <u>Bio/Technology</u> 10:163-167 (1992)						X
EW	*17	Carter et al., "Humanization of an anti-p185 <sup>HER2</sup> antibody for human cancer therapy" <u>Proc. Natl. Acad. Sci.</u> 89:4285-4289 (May 1992)						X
EW	*18	Chamow et al., "A Humanized, Bispecific Immunoadhesin-Antibody That Retargets CD3 <sup>+</sup> Effectors to Kill HIV-1-Infected Cells" <u>Journal of Immunology</u> 153:4268-4280 (1994)						X
EW	*19	Chothia and Lesk, "Canonical structures for the hypervariable regions of immunoglobulins" <u>J. Mol. Biol.</u> 196(4):901-917 (1987)						X
EW	*20	Clackson et al., "Making antibody fragments using phage display libraries" <u>Nature</u> 352:624-628 (1991)						X
EW	*21	de Kruif et al., "Leucine Zipper Dimerized Bivalent and Bispecific scFv Antibodies from a Semi-synthetic Antibody Phage Display Library" <u>Journal of Biological Chemistry</u> 271(13):7630-7634 (March 29, 1996)						X
EW	*22	Dietsch et al., "Bispecific Receptor Globulins, Novel Tools for the Study of Cellular Interactions" <u>Journal of Immunological Methods</u> 162:123-132 (1993)						X

Examiner

Date Considered

2/10/02

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				Filing Date 07 Mar 2000	Group Unassigned
<b>OTHER DISCLOSURES (Including Author, Title, Date, Pertinent Pages, etc.)</b>					
23	*	Ellison et al., "The nucleotide sequence of a human immunoglobulin C <sub>γ</sub> gene" <u>Nucleic Acids Research</u> 10(13):4071-4079 (1982)			
24	*	Ellman et al., "Biosynthetic Method for Introducing Unnatural Amino Acids Site-Specifically into Proteins" <u>Meth. Enzym.</u> 202:301-336 (1991)			
25	*	Fanger et al., "Bispecific Antibodies" <u>Critical Reviews in Immunology</u> 12(3,4):101-124 (1992)			
26	*	Feng et al., "Aligning Amino Acid Sequences: Comparison of Commonly Used Methods" <u>J. Mol. Evol.</u> 21:112-125 (1985)			
27	*	Feng et al., "Progressive Alignment and Phylogenetic Tree Construction of Protein Sequences" <u>Methods in Enzymology</u> 183:375-387 (1990)			
28	*	Feng et al., "Progressive Sequence Alignment as a Prerequisite to Correct Phylogenetic Trees" <u>J. Mol. Evol.</u> 25:351-360 (1987)			
29	*	Figini et al., "In Vitro Assembly of Repertoires of Antibody Chains on the Surface of Phage by Renaturation" <u>J. Mol. Biol.</u> 239:68-78 (1994)			
30	*	Goddard et al. (NCBI/GenBank EST; GenBank accession number AF048774) (1998)			
31	*	Goddard et al. (NCBI/GenBank EST; GenBank accession number AF048775) (1998)			
32	*	Griffiths et al., "Isolation of High Affinity Human Antibodies Directly From Large Synthetic Repertoires" <u>EMBO Journal</u> 13:3245-3260 (1994)			
33	*	Gruber et al., "Efficient Tumor Cell Lysis Mediated by a Bispecific Single Chain Antibody Expressed in Escherichia Coli" <u>Journal of Immunology</u> 152:5368-5374 (1994)			
34	*	Hammerling et al., "Use of hybrid antibody with anti-γG and anti-ferritin specificities in locating cell surface antigens by electron microscopy" <u>Journal of Experimental Medicine</u> 128:1461-1469 (1968)			
35	*	Hawkins et al., "Selection of Phage Antibodies by Binding Affinity Mimicking Affinity Maturation" <u>J. Mol. Biol.</u> 226:889-896 (1992)			
36	*	Holliger et al., "'Diabodies': Small bivalent and bispecific antibody fragments" <u>Proc. Natl. Acad. Sci. USA</u> 90:6444-6448 (Jul 1993)			
37	*	Kabat et al. <u>Sequences of Proteins of Immunological Interest</u> , 5th edition, Bethesda, MD:NIH Vol. 1:688-696 (1991)			
38	*	Kostelny et al., "Formation of a Bispecific Antibody by the Use of Leucine Zippers" <u>Journal of Immunology</u> 148(5):1547-1553 (1992)			
39	*	Lasky et al., "DNA sequence analysis of the type-common glycoprotein-D genes of herpes simplex virus types 1 and 2" <u>DNA</u> 3(1):23-29 (1984)			
40	*	Le Doussal et al., "Bispecific Monoclonal Antibody-Mediated Targeting of an Indium-111-Labeled DTPA Dimer to Primary Colorectal Tumors: Pharmacokinetics, Biodistribution, Scintigraphy and Immune Response" <u>J. Nucl. Med.</u> 34:1662-1671 (1993)			
41	*	Le Doussal et al., "Bispecific-Antibody-Mediated Targeting of Radiolabeled Bivalent Haptens: Theoretical, Experimental and Clinical Results" <u>Int. J. Cancer Suppl.</u> 7:58-62 (1992)			
42	*	Marks et al., "By-passing immunization: building high affinity human antibodies by chain shuffling" <u>Bio/Technology</u> 10:779-783 (1992)			
Examiner				Date Considered 2/10/02	
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43	*	Marks et al., "By-passing immunization: human antibodies from V-gene libraries displayed on phage" <u>J. Mol. Biol.</u> 222:581-597 (1991)			
44	*	McCafferty et al., "Phage antibodies: filamentous phage displaying antibody variable domains" <u>Nature</u> 348:552-554 (1990)			
45	*	Nissim et al., "Antibody fragments from a 'single pot' phage display library as immunochemical reagents" <u>EMBO Journal</u> 13(3):692-698 (1994)			
46	*	Nolan et al., "Bifunctional antibodies: concept, production and applications" <u>Biochimica et Biophysica Acta</u> 1040:1-11 (1990)			
47	*	Presta et al., "Humanization of an Antibody Directed Against IgE" <u>J. Immunol.</u> 151(5):2623-2632 (September 1, 1993)			
48	*	Ridgway et al., "'Knobs-into-holes' Engineering of Antibody CH <sub>3</sub> Domains for Heavy Chain Heterodimerization" <u>Protein Engineering</u> 9(7):617-621 (1996)			
49	*	Rodrigues et al., "Engineering a humanized bispecific F(ab') <sub>2</sub> fragment for improved binding to T cells" <u>Int. J. Cancer</u> (Suppl.) 7:45-50 (1992)			
50	*	Segal et al., "Targeting and Activation of Cytotoxic Lymphocytes" <u>Chem. Immunol.</u> 47:179-213 (1989)			
51	*	Shalaby et al., "Development of Humanized Bispecific Antibodies Reactive with Cytotoxic Lymphocytes and Tumor Cells Overexpressing the HER2 Protooncogene" <u>Journal of Experimental Medicine</u> 175:217-225 (Jan 1, 1992)			
52	*	Songsivilai et al., "Bispecific antibody: a tool for diagnosis and treatment of disease" <u>Clin. Exp. Immunol.</u> 79:315-321 (1990)			
53	*	Stickney et al., "Bifunctional Antibody: A Binary Radiopharmaceutical Delivery System for Imaging Colorectal Carcinoma" <u>Cancer Research</u> 51:6650-6655 (1991)			
54	*	Suresh et al., "Bispecific Monoclonal Antibodies from Hybrid Hybridomas" <u>Methods in Enzymology</u> 121:210-228 (1986)			
55	*	Vaughan et al., "Human Antibodies With Sub-nanomolar Affinities Isolated From a Large Non-immunized Phage Display Library" <u>Nature Biotechnology</u> 14:309-314 (1996)			
56	*	Waterhouse et al., "Combinatorial infection and in vivo recombination: a strategy for making large phage antibody repertoires" <u>Nucleic Acids Research</u> 21:2265-2266 (1993)			
57	*	Weiner et al., "A Human Tumor Xenograft Model of Therapy with a Bispecific Monoclonal Antibody Targeting c-erbB-2 and CD16" <u>Cancer Research</u> 53:94-100 (1993)			
58	*	Wells and Powers, "In vivo formation and stability of engineered disulfide bonds in subtilisin" <u>J. Biol. Chemistry</u> 261(14):6564-6570 (May 15, 1986)			
59	*	Zhu et al., "Remodeling domain interfaces to enhance heterodimer formation" <u>Protein Science</u> 6(4):781-788 (Apr 1997)			
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